UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,945	10/15/2003	Harvel K. Crumley	D-7321	7656

7590 10/27/2006

Arthur G. Yeager
Arthur G. Yeager, P. A.
Suite 1
245 East Adams Street
Jacksonville, FL 32202

EXAMINER	
GRAYSAY, TAMARA L	
ART UNIT	**PAPER NUMBER**
3636	

DATE MAILED: 10/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	**Application No.** 10/685,945	**Applicant(s)** CRUMLEY, HARVEL K.
	Examiner Tamara L. Graysay	**Art Unit** 3636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 July 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *14-16,18-22 and 25-40* is/are pending in the application.

4a) Of the above claim(s) *18-22, 33 and 37-40* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *14-16,25-32 and 34-36* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 October 2003 and 24 July 2006* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restriction

Claims 18-22, 33 and 37-40 are withdrawn for the reasons presented in paragraphs 1-5 below.

1. **Claims 18-22 are withdrawn** from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 24 July 2006.

2. With regard to the preceding paragraph, applicant is reminded of the following:

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder**. Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

3. Since applicant has received an action on the merits for the originally presented invention of species A as discussed in the following paragraph, this invention of species A has been constructively elected by original presentation for prosecution on the merits. Accordingly, newly submitted **claims 33 and 37-40 are withdrawn** from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

NOTE (1): Claim 33 has been included here because the claimed subject matter is directed to an embodiment including a pair of spaced bulbous elements attached to the opposite end portion. The opposite end portion is defined in claim 25 as extending freely through the continuous masonry bond beam. Therefore, this claim has been treated as being directed to the embodiment depicted in FIG. 8, i.e., a combination of that depicted in FIG. 6 and FIG. 9. As such the claim is directed to an invention that is independent or distinct from the invention originally claimed as noted in the following paragraph.

NOTE (2): Claim 40 has been treated as dependent upon claim 39, not 37, because claim 39 provides antecedent basis for the subject matter recited in claim 40.

4. Newly submitted claims 33 and 37-40 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

This application contains claims directed to the following patentably distinct species:

A. FIGS. 1-5 (originally claimed)
B. FIGS. 6, 7
C. FIG. 9, 10

The species are independent or distinct because

- Inventions of species A and species B are directed to related products. The related inventions are distinct if the (1) the inventions as claimed are either not capable of use together or can have a materially different design, mode of operation, function, or effect; (2) the inventions do not overlap in scope, i.e., are mutually exclusive; and (3) the inventions as claimed are not obvious variants. See MPEP § 806.05(j).

  In the instant case, the inventions as claimed do not overlap in scope. Furthermore, the inventions as claimed do not encompass overlapping subject matter and there is nothing of record to show them to be obvious variants.

- Inventions of species A and species C are directed to related products. The related inventions are distinct if the (1) the inventions as claimed are either not capable of use together or can have a materially different design, mode of operation, function, or effect; (2) the inventions do not overlap in scope, i.e., are mutually exclusive; and (3) the inventions as claimed are not obvious variants. See MPEP § 806.05(j).

  In the instant case, the inventions as claimed do not overlap in scope. Furthermore, the inventions as claimed do not encompass overlapping subject matter and there is nothing of record to show them to be obvious variants.

- Inventions of species B and species C are directed to related products. The related inventions are distinct if the (1) the inventions as claimed are either not capable of use together or can have a materially different design, mode of operation, function, or effect; (2) the inventions do not overlap in scope, i.e., are mutually exclusive; and (3) the inventions as claimed are not obvious variants. See MPEP § 806.05(j).

In the instant case, the inventions as claimed do not overlap in scope. Furthermore, the inventions as claimed do not encompass overlapping subject matter and there is nothing of record to show them to be obvious variants.

- Inventions of species B and species C are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct if they do not overlap in scope and are not obvious variants, and if it is shown that at least one subcombination is separately usable.

  In the instant case, subcombination species B does not overlap in scope with subcombination species C and subcombination species B has separate utility such as without the double plate required for species C. See MPEP § 806.05(d).

Currently, no claim is generic to all species.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

5. Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions require a different field of search (see MPEP § 808.02) and have acquired a separate status in the art due to their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Drawings

6. The drawings filed 15 October 2003 and the replacement sheet filed 24 July 2006 are objected to because of the following:

- They fail to comply with 37 CFR 1.84(p)(1) because inverted commas must not be associated with reference characters. For example, 39, 29 (FIG. 4); 18 (FIG. 8). Applicant may consider associating a letter with the reference character, e.g., 39a, 29a, 18a. Appropriate correction to the specification is required.
- Reference character 39' (see immediately preceding paragraph for objection to the use of an inverted comma) at page 6, line 13, is not depicted in FIG. 5.
- They fail to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 45 (FIG.5).
- FIG. 6: Reference characters 17 (passageway), 24 (bulbous element) and 49 (sleeve) lack an appropriate lead line.
- FIG. 7: The depiction of the hook member 52 and loop ends 53 appear to be inaccurate insofar as each hook member 52 and associated loop end 53 is at the same side of the elongated member 18 in FIG. 6 but in FIG. 7 the lead lines depict the associated loop end being located on a side opposite the depending hook member.
- They fail to comply with 37 CFR 1.84(p)(5) because they do not include the following reference character(s) mentioned in the description: "61" (washer; P.7, L.1).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 14-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Greenberg (US-2002/0041796).

Claim 14: Greenberg discloses a masonry building comprising

a concrete foundation (15; FIG. 9),

a plurality of masonry walls (the interlocked vertical courses include a plurality of aligned walls, as broadly recited: FIG. 9);

a continuous masonry bond beam (102; FIG. 9) at the upper portion (i.e., above the lower courses) of the plurality of masonry walls.

The plurality of masonry walls include

a plurality of side by side vertical hollow wall sections (e.g., one hollow is depicted at the left side of FIG. 9);

at least one elongated member (e.g., 20; FIG. 9) positioned inside one hollow section of each masonry wall;

each elongated member having one end portion secured to the foundation (25; FIG. 9) and another end portion extending through the masonry bond beam (the end 21 extends "through" the bond beam insofar as it is within the confines of the bond beam side walls); and

means attached to the another end portion of each elongated member for tensioning each elongated member (plate 100 and nut 33; FIG. 9).

Claim 15: Greenberg further discloses a threaded upper stud (21; FIG. 7).

Claim 16: Greenberg further discloses

the upper threaded stud passes through a passageway in the masonry bond beam (the upper threaded stud 21 extends "through" as broadly recited, the passageway 106; FIG. 9) and extends above it (for example, through the elements 124, 126, 128 extends above the bond beam 102; FIG. 9), and

the means for tensioning includes a nut (33; FIG. 9) threaded on the upper stud (at portion 21) to tension the elongated member.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 25-27, 29, 34 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greenberg (US-2002/0041796) in view of Ramsey (book, Architectural Graphic Standards).

Claim 25: Greenberg discloses a masonry building comprising

a concrete foundation (15; FIG. 9),

a plurality of masonry walls (the interlocked vertical courses include a plurality of aligned walls, as broadly recited: FIG. 9) supported on and attached to the foundation (FIG. 9),

a continuous masonry bond beam (102; FIG. 9) at the upper portion (i.e., above the lower courses) of the plurality of masonry walls, the bond beam inherently has an upper substantially flat surface.

The plurality of masonry walls include

a plurality of side by side vertical hollow wall sections (e.g., one hollow is depicted at the left side of FIG. 9);

at least one elongated structural member (e.g., 20; FIG. 9) having opposite end portions (e.g., the top and bottom) positioned inside one hollow section of each masonry wall;

each elongated member having one end portion secured to the foundation (25; FIG. 9) and the opposite end portion extending freely through the masonry bond beam (the end 21 extends freely "through" the bond beam insofar as it is within the confines of the bond beam side walls); and

adjustment means (nut 33) attached to the opposite end portion of each elongated member for tensioning each elongated structural member (FIG. 9).

First, Greenberg is silent as to how adjacent masonry walls are associated with each other. Second, the Greenberg adjustment means (nut 33) is supported on the upper surface of the horizontally extending plate 100, rather than a masonry bond beam.

First, Ramsey (upper right corner of page 163) teaches adjacent masonry walls connected to each other in various ways. For example, using metal lath or hardware cloth every second course in the case of a bearing and nonbearing wall connection. Such an arrangement prevents movement of one wall relative to the adjacent wall. The particular type of connection used is a matter of design choice that is within the level of ordinary skill in the art of masonry construction and design. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Greenberg walls to include adjacent masonry walls being connected to each other, such as suggested by Ramsey, in order to prevent movement of one wall relative to an adjacent wall.

Second, Greenberg suggests adjustment means supported on top of a horizontally extending support beam (i.e., the nut is tightened on top of the horizontally extending plate 100). The particular location of bond beams within a masonry wall is a matter of design choice that is determined by the materials used and the desired rigidity of the masonry wall. For example, Ramsey (lower right corner of page 146) depicts, for example, a bonding course (i.e., bond beam) not more than 34 inches apart or not more than 17 inches apart. Placing the tensioning elements of the structural member above the bond beam upper surface would have been recognized as being within the level of ordinary skill in the art because the bond beam provides a solid bearing surface for engagement of the adjustment elements which place the structural member in tension because the bond beam is a rigid member that inherently ties the wall together in the lateral direction. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the structural member of Greenberg to extend above the bond beam, such as suggested by the bond beam of Ramsey, in order to tie the laterally extending bond beam member to the vertical structural members, thereby providing a rigid masonry structure.

Claim 26: Greenberg further discloses a threaded upper stud (21; FIG. 7).

Claim 27: Greenberg further discloses

the upper threaded stud passes through a passageway in the masonry bond beam (the upper threaded stud 21 extends "therethrough" as broadly recited, the passageway 106; FIG. 9) and extends above it (for example, through the elements 124, 126, 128 extends above the bond beam 102; FIG. 9), and

the means for tensioning includes a nut (33; FIG. 9) threaded on the upper stud (at portion 21) to tension the elongated member.

Claims 29 and 36: Greenberg further discloses the elongated member is substantially rigid and substantially non-stretchable (20 is a post-tensioning rod which is inherently substantially rigid and substantially non-stretchable).

Claim 34: Greenberg further discloses a threaded rod (at least the end of the rod 20 which receives the nut is threaded; FIG. 9).

9. Claims 28 and 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greenberg (US-2002/0041796) and Ramsey (book, Architectural Graphic Standards) as applied to claim 25 above, and further in view of Crumley (US-6014843).

Claim 28: Greenberg further discloses said one end portion of the at least one elongated member includes threads (e.g., 21). Greenberg mentions several types of connection between the elongated member and the foundation (at [0033]).

Greenberg as modified by Ramsey does not mention the foundation having spaced bores to receive the at least one elongated member and an adhesive for securing the at least one elongated member to the foundation.

Crumley teaches (FIG. 11) connection of a threaded member to a foundation. The connection includes the use of spaced bores (6:21-23; hole in foundation 44) in a concrete foundation to receive at least one elongated member that includes threads (e.g., 5:33-43; 65) and an adhesive (43) for firmly securing the elongated member to the foundation. Such an arrangement permits installation of the elongated members after the foundation has been poured and hardened, thus avoiding interference of the elongated members when the top surface of the foundation is finished.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify further the one end of the elongated member of Greenberg and Ramsey to include bores in the foundation and adhesive in the bores for securing the elongated members, such as suggested by Crumley, in order to install the elongated members after the foundation is poured and hardened.

Claim 30: Greenberg as modified by Ramsey includes an elongated tensioning member, but does not include an elongated member that includes wire rope.

Crumley teaches the use of an elongated member that includes wire rope. Such an arrangement would allow for minor misalignment of the top and bottom connections as well as reduced space required for the structural elongated tensioning members.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify further the elongated member of Greenberg and Ramsey to include a wire rope elongated member, such as suggested by Crumley, in order to allow for minor misalignment of the top and bottom connections as well as reduced space required for the structural elongated tensioning members.

Claim 31: Crumley further teaches a bulbous element (66; FIG. 11) attached to the opposite end of the wire rope.

Claim 32: Crumley further teaches a bulbous element (65; FIG. 11) attached to the one end of the wire rope. The end is bulbous insofar as it is wider (as viewed in FIG. 11) than the wire rope (23).

10. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Greenberg (US-2002/0041796) and Ramsey (book, Architectural Graphic Standards) as applied to claim 25 above, and further in view of Herbst (US-4904122).

Claim 35: Greenberg as modified by Ramsey does not include rebar having upper and lower threaded end studs, but rather uses an elongated member having threaded stud ends (FIG. 7, 3a).

Herbst teaches the use of a rebar having a threaded exterior for use with a nut and for embedding in an adhesive. Such an arrangement provides flexibility of use because anchorage of the device can be accomplished throughout the length of the rebar.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify further the elongated member of the Greenberg and Ramsey combination to include a threaded rebar, such as suggested by the threaded rebar of Herbst, in order to provide flexibility of use because anchorage of the device can be accomplished throughout the length of the rebar.

Response to Arguments

11. Applicant's arguments filed 24 July 2006 have been fully considered but they are not persuasive.

- In response to the argument that Greenberg, as applied to claims 14-16, relates to a retaining wall and not a masonry building, the claim broadly requires masonry walls which are met by the masonry walls of Greenberg. A masonry building as set forth in the preamble is broadly one that includes masonry – such as the masonry foundation of Greenberg.
- In response to the argument that Greenberg course 102 is not a bond beam, the claim broadly recites a continuous bond beam that is formed, and the Greenberg course is continuous in that the elements are connected thus forming a bond beam.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamara L. Graysay whose telephone number is 571-272-6728. The examiner can normally be reached on Mon - Fri from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter M. Cuomo, can be reached on 571-272-6856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tamara L. Graysay
Examiner
Art Unit 3636

20061014